



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,054	10/23/2003	Peter D. Costantino	14596-105002US1	7277

65989 7590 06/09/2009
KING & SPALDING
1185 AVENUE OF THE AMERICAS
NEW YORK, NY 10036-4003

EXAMINER

SEVERSON, RYAN J

ART UNIT	PAPER NUMBER
----------	--------------

3731

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

06/09/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptomailnyc@kslaw.com

Office Action Summary	Application No. 10/692,054	Applicant(s) COSTANTINO ET AL.	
	Examiner Ryan J. Severson	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-49, 51-58 and 61-67 is/are pending in the application.
- 4a) Of the above claim(s) 31, 44-49, 61 and 62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-30, 32-43, 51-58 and 63-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 26-30, 32-43, 51-53, 58, 63-65 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene, Jr. et al. (6,165,193) in view of Richter et al. (3,961,629).** Greene reference discloses a device having a polymeric matrix implant (20, see figure 2) that is capable of expanding from a compressed configuration (see figure 8) to an expanded configuration (see figure 9). The implant supports an aneurysm wall and has a fluid path there through (the pores provide a fluid path). The device further includes a projecting portion (34). A further element (22) is strut-like and is capable of helping support the aneurysm wall and is made of a different material than the implant (20). However, Greene reference does not disclose the matrix is reticulated. Attention is drawn to Richter reference, which teaches the use of a fully reticulated matrix (see column 5, lines 30-50) for use in surgical procedures for rapid fluid absorption. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the polymer matrix of Green reference a fully reticulated matrix in the manner taught by Richter reference for rapid fluid absorption to expand the implant rapidly to fill the aneurysm.

Art Unit: 3731

3. Regarding claim 32, the combination of Greene and Richter references does not disclose a second implant. However, the courts have held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

4. Regarding claims 51-53 and 65, the combination of Greene and Richter references does not disclose the range of pore diameter sizes as claimed. However, the courts have held where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)

5. **Claims 54, 55 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene, Jr. et al. (6,165,193) in view of Richter et al. (3,961,629) as applied to claims 27 and 63 above, and further in view of Spaans et al.**

(6,784,273). The combination of Greene and Richter references does not disclose the foam is polyurethane with a polycarbonate polyol component and an isocyanate component. Attention is drawn to Spaans reference, which teaches a polymeric foam for implants (see column 1, lines 65-67) may be polyurethane (see title) with an isocyanate component (see column 1, lines 56-59) and a polycarbonate component (see column 2, lines 49-54) to provide a device that has good mechanical properties but is lightweight and flexible. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the polymeric foam implant of Greene reference with polyurethane having isocyanate and polycarbonate components,

Art Unit: 3731

as taught by Spaans reference, to provide a device that has good mechanical properties but is lightweight and flexible.

6. **Claims 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene, Jr. et al. (6,165,193) in view of Richter et al. (3,961,629) as applied to claim 63 above, and further in view of Slaikeu et al. (6,231,590).** The combination of Greene and Richter references does not disclose the foam further includes growth factors or elastin. Attention is drawn to Slaikeu reference, which teaches an implant may include elastin and/or growth factors (see column 7, lines 15-21) to promote cellular ingrowth between the implant site and the implant itself. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include elastin and growth factors in the implant of Greene reference, as taught by Slaikeu reference, to promote cellular ingrowth between the implant site and the implant itself.

Response to Arguments

7. Applicant's arguments filed 18 February 2009 have been fully considered but they are not persuasive. Applicant argues the combination fails to disclose a second configuration where the implant is expanded but has a smaller volume than the vascular formation. However, Examiner asserts that figure 9 shows the implant expanded (therefore, in a second configuration) relative to the compressed configuration that does not fill the vascular malformation. Therefore, the arguments are deemed not persuasive and the rejection maintained.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

9. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan J. Severson whose telephone number is (571) 272-3142. The examiner can normally be reached on Monday - Friday 8:30-5:00.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3731

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. J. S./
Examiner, Art Unit 3731
6/4/09

/Anh Tuan T. Nguyen/
Supervisory Patent Examiner, Art Unit 3731
6/4/09